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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,709	08/01/2001	Peter D. Karabinis	111223.122US1	2481
20792	7590	07/12/2004	EXAMINER	
MYERS BIGEL SIBLEY & SAJOVEC			NGUYEN, LEE	
PO BOX 37428			ART UNIT	
RALEIGH, NC 27627			PAPER NUMBER	
			2682	

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,709

Applicant(s)

KARABINIS ET AL.

Examiner

LEE NGUYEN

Art Unit

2682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-154 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-149 is/are allowed.
- 6) ☒ Claim(s) 150-154 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 6.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The IDS filed paper Nos. 4, 6 have been considered and recorded in the file.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 150-154 are rejected under 35 U.S.C. 102(e) as being anticipated by Mayfield et al. (US 6,735,437).

Regarding claims 150, 152, 154, Mayfield teaches a satellite-terrestrial communication system using satellite uplink and downlink frequencies, comprising: a terrestrial system producing a signal at a satellite uplink frequency that is transmitted to a terrestrial subscriber terminal; and said terrestrial system receiving a signal at a satellite

downlink frequency that was transmitted by said terrestrial subscriber terminal (col. 2, 3-11).

Regarding claim 151, Mayfield also teaches that said terrestrial system includes a signal nulling means in the direction of a satellite that produces signals using said uplink and said downlink frequencies (col. 3, 25-34).

Regarding claim 153, Mayfield also teaches that a satellite ground user using said uplink and downlink frequencies is geographically isolated from said terrestrial subscriber terminal (col. 3, 15-34).

Allowable Subject Matter

4. Claims 1-149 are allowed.

Regarding claims 1, 19, 36, 37, 68, 86, 103-104, 119, 130-136, 149, the prior art of record fails to teach configuring at least one terrestrial cell that at least partially overlaps the first satellite spot beam having a third set of frequencies associated therewith; and at least one of assigning, reusing and borrowing, by the terrestrial system, at least one of a portion of the second set of frequencies and a portion of the first set of frequencies used in the first central portion, responsive to predetermined criteria associated

with the third set of frequencies, including at least one of assigning, reusing and borrowing at least one of the second set of frequencies when the second set of frequencies are at least substantially geographically distant from the first satellite spot beam.

Regarding claim 20, the prior art of record fails to teach configuring at least one third communications area that at least partially overlaps the first communications area, having a third set of frequencies associated therewith; and at least one of assigning, reusing and borrowing, by the third communications area, at least one of a portion of the second set of frequencies and a portion of the first set of frequencies used in the first central portion, responsive to predetermined criteria associated with the third set of frequencies, including at least one of assigning, reusing and borrowing at least one of the second set of frequencies when the second set of frequencies are at least substantially geographically distant from the first satellite spot beam.

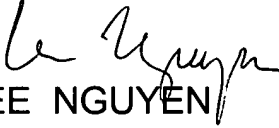
Regarding claims 52, 87, the prior art of record fails to teach configuring at least one terrestrial cell that at least partially overlaps the first satellite spot beam having a third set of frequencies associated therewith; and at least one of assigning, reusing and borrowing, by the at least one

terrestrial cell, at least one of a portion of the second set of frequencies and a portion of the first set of frequencies used in the first central portion, responsive to predetermined criteria associated with the third set of frequencies for communication therewith, including at least one of assigning, reusing and borrowing at least one of the second set of frequencies when the second set of frequencies are at least substantially geographically distant from the first spot beam.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEE NGUYEN whose telephone number is (703)-308-5249. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, VIVIAN CHIN can be reached on (703) 308-6739. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 6/28/09
LEE NGUYEN
Primary Examiner
Art Unit 2682